



Western Area Power Administration Sierra Nevada Region Draft Implementation Brochure

2004 Marketing Plan

Customer Meeting

May 22, 2002



Opening Remarks

- Purpose
 - Conceptual Framework
 - Draft Implementation Brochure
 - 2 week Comment Period
- Administrative Matters
- Control Area Formation



Agenda

- Background
- Brochure Overview
- Project Use
- Base Resource
- Custom Product
- Ancillary Services
- Transmission & Delivery
- Summary



Background

- Marketing Plan developed during the same time California was restructuring its electric utility industry
 - AB 1890 passed in 1996
 - CAISO operational April 1998
- Marketing Plan
 - Draft FRN - February 1997
 - Final Marketing Plan EIS/ROD - April 1997
 - Final Marketing Plan - June 1999
- Base Resource Contracts
 - 12/31/00 - 60 existing customers and 13 new allottees
 - 06/30/03 - 4 First Preference Customers
- FRN requires Custom Product contracts by 12/31/02



Brochure Assumptions

- Federal Control Area
 - Brochure assumes formation of Federal Control Area
 - CAISO considered where applicable



Brochure Assumptions

- Preference Customer Groups
 - Variable Resource Customers
 - Full Load Service Customers



Brochure Assumptions

- Custom Product Focus
 - Initially designed for the Full Load Service customers
 - Recent interest by Variable Resource customers



Brochure Assumptions

- New Allottees
 - 13 new CVP Preference Customers
 - Base Resource Contracts signed
 - Issues with New Allottees
 - Metering
 - Transmission & Delivery
 - Exporting to customers in other Control Areas
 - No historical load data



Project Use



Project Use

- Statutory Requirements
- Background
 - Historically consumes 20-30% of average annual gross energy generation of the CVP
 - 75% of energy consumed by 3 major pumps (Tracy, San Luis complex, and Dos Amigos)



Project Use

- Delivery
 - Over 180 delivery points
 - Reclamation is our “customer” for these loads
 - 45% of energy consumed is directly connected to Western’s system
 - May aggregate smaller loads
- Preference customers continue to be responsible for paying their share of the costs associated with delivering power to Project Use loads



Project Use

- Multi-Faceted Strategy for Serving Project Use Load
 - Work with Reclamation and Customers
 - Power O&M Cost Sub-Allocation group
 - Understanding the nature of Project Use loads
 - Forward purchase(s)
 - For Critically Dry year
 - Purchase a minimum of 270 GWh
 - Options for up to 500 GWh



Project Use

- Multi-Faceted Strategy for Serving Project Use Load (continued)
 - Customer Flexibility for Peaking Base Resource
 - “Self provision”
 - Off-peak to on-peak energy substitution of Project Use load
 - Customers provide energy as opposed to dollars
 - Customer would need to contractually commit
 - Not intended for replacing 270 GWh forward purchase



Project Use

- Default position
 - CVP operated for Project Use requirements
 - Banking arrangement with 3rd party



Base Resource



Base Resource

- Definition
 - CVP, Washoe, Existing Contracts
 - Including other certain power purchases to support the Project
 - Subtract Project Use & First Preference Statutory Entitlements, maintenance, reserves, transformation losses, Federal Control Area requirements
- Varies daily, weekly, monthly, and annually based on hydrology and other constraints
- Will provide approximately 40% of the energy a customer receives today through integration with PG&E



Base Resource

- Firming Base Resource
 - In response to customer interest, Western is considering a purchase
 - 150 to 200 MW
 - 7 days a week, 24-hours a day
 - 1300 to 1700 GWh annually
 - This would become part of the Base Resource



Base Resource

- Reclamation and Western
 - Rolling resource forecasts
 - Annually
 - Monthly
 - Weekly
 - Daily



Base Resource

- Daily and Weekly “forecast” of energy
 - Participate with Reclamation in water operations meetings
 - Work with Reclamation to develop forecast
 - Help predict short term purchase requirements



Base Resource

- Daily Allocation of Energy
 - Percent of the Base Resource
 - Must have sufficient load at Western delivery point(s)



Base Resource

- Preparing Daily Schedules
 - Water Operations requirements from Reclamation
 - Parameters
 - Maximum Capacity
 - Minimum Capacity
 - Total Energy
 - Ancillary Services Available
 - Scheduled Unit Outages
 - Other restrictions that may affect units, plants or water releases



Base Resource

Preparing Daily Schedule

- CVP Generation and Other Purchase Contracts
 - Project Use
 - First Preference
 - Federal Control Area



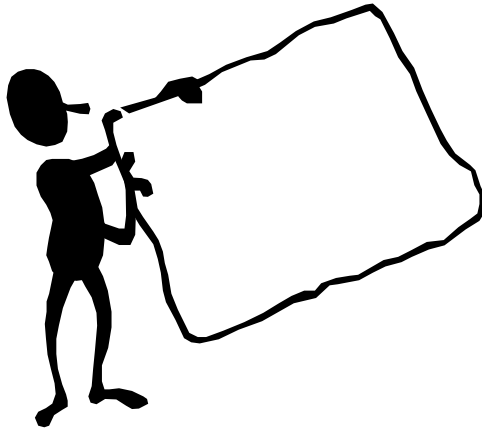
Base Resource

- Determine daily maximum capacity for each customer
- Determine daily minimum capacity for each customer

Base Resource

Assumptions of Customer Classes

- Variable Resource Customers
- Full Load Service Customer





Base Resource

Resource Shaping

- Individually by Variable Resource Customers
- Individually or by aggregated groups for Full Load Service Customers



Base Resource

Full Load Service Customers

- Aggregated Groups
 - Lower risks
 - More efficient use of Base Resource
 - Custom Product Purchase



Base Resource

Full Load Service Customers

- Formation of Federal Control Area
 - If Customers not in Federal Control Area
 - Subject to CAISO tariff and protocols
 - Western to work with customers
- Custom Product Purchase
 - Total load through Western delivery point(s)
 - Customers responsible for load growth
- Total load not to exceed 50 MW per customer at Western's current delivery point



Base Resource

Full Load Service Customers

- Base Resource + Custom Product
 - Base Resource may not meet all needs
 - Custom product purchase to serve total load through Western delivery points
 - May aggregate all Full Load Service customers for making Custom Product Purchase(s)



Base Resource

Full Load Service Customers

- Base Resource + Custom Product + Other Contracts
 - Customers with existing contracts
 - Loads greater than Base Resource and existing contract
 - Custom Product purchase
 - Individual or aggregated with Full Load Service Customers



Base Resource

Full Load Service Customers

- Conditional Scheduling Coordinator
 - If Customers not in Federal Control Area or not directly connected to Western's system
 - To receive Federal Power from Western
 - Will need a Scheduling Coordinator (or)
 - Conditional Scheduling Coordinator
 - If unable to get Scheduling Coordinator
 - Western will work with customers to find a method for delivering their Federal power



Base Resource

Full Load Service Customers

- Resource Sharing

- Aggregate Full Load Service Customer Loads and compare against Base Resource energy
 - To determine if spot market purchase is required
- Each customer receives Base Resource percentage allocation
 - Unallocated Base Resource returned to Western
 - Exchange Energy product
 - Distributed by ratio
- Custom Product for balance of loads



Base Resource

Full Load Service Customers

- Custom Product Purchase
 - Aggregation
 - Economies of scale
 - Block purchases
- Exchange Program
 - Exchange energy serves as initial Exchange Program



Base Resource

- Aggregation Possibility
 - Joint Powers Authority
 - Requires approval of Western's Administrator
 - Could result in adjustment to Base Resource



Base Resource

Variable Resource Customers

- Receives percent allocation of Base Resource
- Western will provide parameters
 - Max & min capacity
 - Total MWh
- Each customer will submit a “preferred schedule”



Base Resource

Variable Resource Customers

- Western will combine all schedules (Variable and Full Load) to determine if all schedules can be met by water operations requirements and other purchase contracts
- If changes are required Western will make changes and provide “Final Schedules”



Base Resource

Variable Resource Customers

- Base Resource + Custom Product
 - Some customers have indicated they may want Western to be included in the Custom Product purchase
- Scheduling of Energy
 - Bilateral transaction
 - Import/Export
 - CAISO Protocols



Base Resource

Variable Resource Customers

- Exchange Program
 - Reallocation process after 2003
 - No exchange program required at this time
 - Will consider if needed



Base Resource

First Preference Customers

- Western anticipates being the SC for First Preference Customers
 - Federal Control Area
- Loads aggregated
 - Base Resource up to statutory entitlement
 - Purchase required to meet statutory entitlement
 - Considered as Project costs and paid for by all Preference customers
 - Loads above statutory entitlement will be Custom Purchase
- If Western not SC for First Preference
 - Will trade energy to other SC



Custom Product



Custom Product

- Scheduling Agent Service
 - Develop Load and Resource schedules
 - Analysis of short term markets
 - Provide schedules to customers Scheduling Coordinator



Custom Products

- Scheduling Coordinator Services
 - Receive load and resource schedules from customers Scheduling Agent
 - Submit schedules to Control Area Operator
 - Receive adjustments to loads and resources in real time
 - Submit changes to Control Area Operator
 - Submit load and resource meter data to Control Area Operator
 - Validate settlement data and dispute settlement charges as appropriate
 - Provide actual meter demand and energy data to customers' Scheduling Agent
- Western will serve as conditional SC or SC for Project Use loads



Custom Products

- Supplemental Power Purchase
 - Assist customers in identifying Custom Product Purchase requirements
 - Aggregate requirements for solicitation process
- FRN date change
 - To accommodate Custom Power Purchase planning and solicitation process the date will be changed to no later than June 30, 2004



Ancillary Services



Ancillary Services

- Control Area Services
 - Regulation
 - Spinning Reserve
 - Non-Spinning Reserve
 - Replacement Reserves
 - Voltage Support
 - Black Start



Ancillary Services

- Western will use CVP resources to meet Project Use, Federal Control Area, and First Preference requirements before any ancillary services are provided to the Preference Customers
- Western will provide Spin and Non-Spin to customers if available from CVP generation



Transmission and Delivery



Transmission and Delivery

- Base Resource available at generator bus or other agreed upon point
- Customers current delivery mechanisms
 - Direct connect to Western transmission
 - Or connected through a UDC directly connected to Western transmission
 - Directly connected to CAISO controlled grid
 - Directly connected to PG&E's distribution system



Transmission and Delivery

- Negotiations
 - Continuation of existing transmission arrangements under 2948A
 - If not then Western may assist customers in acquiring necessary PG&E Wholesale Direct Access Tariff Service
 - Unknown at this time how Allottees outside of Federal Control area and CAISO will receive power



Transmission and Delivery

- Pacific AC Intertie (PACI) Policy
 - Western will use PACI for benefit of the Project
 - Options
 - Project Use Purchases
 - Base Resource Firming
 - Custom Product Purchases
 - Transmission sales via OASIS



Summary



Summary

- Review of Key Implementation Elements
 - Federal Control Area
 - Project Use
 - Base Resource Firming Purchase
 - Variable Resource and Full Load Service customers
 - Conditional SC
 - Exchange Program
 - Ancillary Services
 - Transmission & Delivery



Next Steps



Questions
